

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>B-4617-WO</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/CH2004/000453</b>	International filing date (day/month/year) <b>15.07.2004</b>	Priority date (day/month/year) <b>16.07.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>G07D7/12, G07D7/00</b>		
Applicant <b>KBA-GIORI S.A.</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of **8** sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of **4** sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2), with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-13 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1-27 \_\_\_\_\_ received by this Authority on 17.05.2005 with letter
- nos.\* \_\_\_\_\_ received by this Authority on of 13.05.2005
- ☒ the drawings:
- sheets 1/6-6/6 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-27	YES
	Claims		NO
Inventive step (IS)	Claims	5	YES
	Claims	1-4, 6-27	NO
Industrial applicability (IA)	Claims	1-27	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

## 1. Reference is made to the following documents:

D1: US-A-5 598 006 (STRINGA LUIGI)  
28 January 1997 (1997-01-28)

D2: US-A-3 412 993 (GUALTIERO GIORI)  
26 November 1968 (1968-11-26)

D3: US-B-6 349 641 1 (BAYER HARALD ET AL)  
26 February 2002 (2002-02-26)

D4: US-A-3 782 543 (MARTELLI M)  
1 January 1974 (1974-01-01)

D5: GB-A-2 271 456 (MARSHALL BRIAN DENNIS)  
13 April 1994 (1994-04-13)

D6: EP-A-O 624 467 (SAKURAI GRAPHIC SYSTEMS CORP)  
17 November 1994 (1994-11-17)

D7: DE 43 43 616 A (KBA PLANETA AG)  
22 June 1995 (1995-06-22).

## 2. Summary:

The present application fails to satisfy the requirements of PCT Article 33(1) because the subject matter of claims 1-4 and 6-27 does not involve an inventive step (PCT Article 33(3)).

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### 3. Inventive step

#### 3.1 Independent claim 1

Document D1 is considered to be the prior art closest to the subject matter of claim 1. Said document discloses (the references in parentheses are to D1):

- 1) a device for the quality control of printed sheets ("The present invention relates to an installation for quality control of printed sheets, especially security paper, comprising means for transferring said sheets and means for checking the print quality", column 1, lines 7-10);
- 2) which device comprises a first inspection system for detecting image data on a recto face of the sheet and an assessment system for assessing the quality of the sheet on the basis of the detection report from said first inspection system (figure 1, reference signs 2, 4 and 14);
- 3) a second inspection system for detecting the verso face of the sheet (figure 1, reference signs 3, 5 and 15);
- 4) a third inspection system for shining light through the sheet (figure 1, reference signs 6, 7 and 16-19);

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5) a transport device is assigned to each of  
said inspection devices (figure 1).

The subject matter of claim 1 therefore differs  
from the known subject matter of D1 in that the  
transport devices are not conveyer belts but  
transport cylinders.

The advantage of said cylinders is that the  
assembled device does not have to be a linear  
arrangement and that the design of the cylinders  
is simpler than that of the "conveyors" according  
to D1.

The problem addressed by the present invention can  
consequently be regarded as that of devising a  
transport means for sheet goods, the complexity of  
the design being reduced since it comprises fewer  
components.

Document D2, which relates to the field of  
apparatus for monitoring bank notes after printing  
and before distribution ("apparatus for checking  
banknotes after printing and before packaging",  
D2, column 1, lines 15-17), would be taken into  
account by a person skilled in the art seeking to  
solve the above problem.

Document D2 (see in particular figure 6),  
indicates quite clearly to a person skilled in the

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art that the use of transport cylinders which convey the samples past the detectors is a less complex transport option. A person skilled in the art would therefore solve the aforementioned problem and arrive at claim 1.

The fact that whole banknotes can be inspected in the installation according to the invention cannot contribute to an inventive step, since a person skilled in the art would design the installation in accordance with the sample available to him. Whether or not this sample has one or more applications does not pose a problem which a person skilled in the art would not be able to solve without an inventive step. Moreover, this opinion appears to be further supported by D2 (see column 8, lines 39 and 40), in which it is disclosed that the bank notes are not cut until they have been inspected. A person skilled in the art is therefore fully aware of the inspection of sheets of paper with a plurality of applications.

Therefore, the solution proposed in claim 1 of the present application cannot be considered inventive (PCT Article 33(3)).

### 3.2 Dependent claim 2

The difference between the subject matter of claim 2 and that which a person skilled in the art

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would certainly derive from documents D1 and D2 (in particular figure 6) in combination lies in the fact that the three transport cylinders on which the inspections are carried out are arranged in series in such a way that, after rotating in one of the first two transport cylinders, each sheet is conveyed directly to the respective next transport cylinder, that is to say without any further transport means therebetween.

Thus, a person skilled in the art would also arrive at the subject matter of claim 2 and, consequently, said claim is not inventive (PCT Article 33(3)).

### 3.3 Further claims

Dependent claims 3-4 and 6-27 contain no features which, combined with the features of any claim to which they refer, meet the PCT requirements for inventive step. On the contrary, said claims relate to embodiments of the device *per se* that a person skilled in the art could implement without inventive input. The introduction of a counter, likewise, does not constitute an insoluble problem for a person skilled in the art and the use of fluorescent effects has long been known to a person skilled in the art of document inspection. Counter-pressure cylinders, too, are known; D1 also discloses a similar feature.

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Consequently, said dependent claims do not appear to involve an inventive step.

3.4 Dependent claim 5

The combination of features in dependent claim 5 is not known from the available prior art, nor is it rendered obvious thereby. The reasons are the following:

The prior art does not describe a cylinder with a transparent casing, within which is located the source of the light that shines through the documents to be inspected. The transport means, namely the cylinder, thus also forms part of the inspection device *per se*, thereby simplifying the design of the device. This combinatory effect is not described in the available prior art and therefore is non-obvious. Claim 5 consequently satisfies the requirements of PCT Article 33(3).